

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/010973

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61K47/48 A61K47/30

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, BIOSIS, CHEM ABS Data, EMBASE

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 01/07469 A (VERDINI ANTONIO) 1 February 2001 (2001-02-01) cited in the application  page 9; claims 25-30,47; example 6	1-5,11, 12, 17-22, 28,30,31
Y	JANSEN J F G A ET AL: "ENCAPSULATION OF GUEST MOLECULES INTO A DENDRITIC BOX" SCIENCE, AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE,, US, vol. 266, no. 5188, 18 November 1994 (1994-11-18), pages 1226-1229, XP000500113 ISSN: 0036-8075 page 1229, column 1; figure 3  ----- -/--	1-13, 17-31



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

\* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

1 June 2005

Date of mailing of the international search report

20. 09. 2005

Name and mailing address of the ISA

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International Application No  
PCT/EP2004/010973

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 03/057716 A (BOERTH NANCY JOHNSTON ;NEW RIVER PHARMACEUTICALS INC (US); BISHOP) 17 July 2003 (2003-07-17)  page 3, paragraph 2; claims 1,2,5-11; figure 1 -----	1-5,11, 17, 23-25, 30,31
X	US 2002/054863 A1 (MALIK NAVID ET AL) 9 May 2002 (2002-05-09)  claims 2-6,9-11; figures 10A,10B; example 9A -----	1,2,4,5, 17-22, 28,30,31
X	US 6 410 680 B1 (DENDRIMOLECULAR INC.) 25 June 2002 (2002-06-25)  claims 5,6,22,23; figure 1; examples 6,7 -----	1-8, 17-22, 30,31
Y	WO 03/000777 A (SHEARWATER CORPORATION; ZHAO, XUAN) 3 January 2003 (2003-01-03) page 8, lines 22-25; figure 1; examples 2,5,7 -----	1-13, 17-31
A	WO 96/31231 A (ELAN CORP PLC) 10 October 1996 (1996-10-10) abstract; claim 1 -----	1-13, 17-31

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## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:  
  
Although claim 30 is directed to a method of treatment of the human/animal body (Article 52(4) EPC), the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

11-13 complete; 1-10, 17-31 in part

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 11-13 complete; 1-10, 17-31 in part

A composition comprising: a hyperbranched polymer attached to a core and a protein or polypeptide; whereby the protein or polypeptide is attached to the core by means of a non-enzymatically cleavable linker L. Use of the same for selectively delivering the protein or polypeptide to a target and drug comprising the same. Excluding the subject matter of inventions 2, 3.

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2. claims: 14, 15 complete; 1-10, 17-31 in part

A composition comprising: a hyperbranched polymer attached to a core and a small molecule bioactive agent; whereby the small molecule bioactive agent is attached to the core by means of a non-enzymatically cleavable linker L. Use of the same for selectively delivering the small molecule bioactive agent to a target and drug comprising the same. Excluding the subject matter of inventions 1, 3.

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3. claims: 16 complete; 1-10, 17-31 in part

A composition comprising: a hyperbranched polymer attached to a core and a anti-sense or interfering oligonucleotide; whereby the anti-sense or interfering oligonucleotide is attached to the core by means of a non-enzymatically cleavable linker L. Use of the same for selectively delivering the anti-sense or interfering oligonucleotide to a target and drug comprising the same. Excluding the subject matter of inventions 1, 2.

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International Application No  
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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
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